



AEL.KM.400-1

AEL.KM.400-1 — Single-phase multi-tariff electronic meter designed for the United Kingdom market. It operates at 230 V reference voltage over a 5(100) A current range and measures active energy to accuracy class C. It is MID approved.

230 V

50 Hz ±5%

5(100) A

Direct connection

Class C

Active accuracy (0.5)

IP54

-40...+70 °C outdoor

4 Tariffs

KEY FEATURES

- ◆ Designed for the United Kingdom market
- ◆ 230 V · 100 A rated current
- ◆ Bidirectional metering and remote disconnect
- ◆ Cellular / RF communication options
- ◆ Four-tariff active energy metering with demand registration
- ◆ Historical index and event records

MID

CE

EN 50470

TECHNICAL SPECIFICATIONS

ELECTRICAL DATA

Reference voltage (Un)	230 V
Operating voltage range	50 V (min) – 330 V (max)
Reference frequency (Fn)	50 Hz ±5%
Reference current (In/Ib)	5 A
Maximum current (Imax)	100 A
Starting current (Ist)	0.02 A
Minimum current (Imin)	0.15 A
Transitional current (Itr)	0.5 A
Accuracy class	Class C · opt. B
Meter constant	1600 imp/kWh
Voltage circuit consumption	1 W
Current circuit consumption	4 VA

METERING AND RECORDING

Meter definition	Single-phase, 2-wire, demand-metering active electronic meter
Connection type	Directly connected
Number of tariffs	4
Measurement direction	Bidirectional
Data storage capacity	1 year
LCD display	6+3 digits
Optional features	Disconnect/reconnect relay

COMMUNICATION

Communication interface	Optical port (IEC 62056-21)
Baud rate	300 – 19,200 Baud
Expansion modules	Cellular / RF (optional)

ENVIRONMENT AND MECHANICS

IP class	IP54 (outdoor)
Operating temperature	-40 °C ... +70 °C
Relative humidity	95%
Mechanical / EM environment	M1 / E2
ESD withstand	Contact 8 kV · air 15 kV
Impulse voltage withstand	6 kV

BATTERY, CLOCK AND LIFE

System battery life	≥ 10 years
RTC battery life	≥ 10 years
Shelf life	≥ 4 years
Clock accuracy	0.5 s/day (at room temperature)

STANDARDS AND APPROVALS

Measuring instruments directive	MID · CE
Standards	EN 50470-1, EN 50470-3

